



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,088	04/20/2007	Peter Balzer	14219-120US1 P2004,0159 U	4163
26161	7590	09/15/2008	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			SOHN, SEUNG C	
			ART UNIT	PAPER NUMBER
			2878	
			NOTIFICATION DATE	DELIVERY MODE
			09/15/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 10/590,088	Applicant(s) BALZER ET AL.	
	Examiner SEUNG C. SOHN	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/21/2006; 07/15/2008</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. ***Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (Patent No. US 5,455,415).***

Regarding claim 1, Yamada et al. shows in Fig. 1 a light sensor for determining a position of a light source, the light sensor comprising: a photo detector, and a light modulator configured to modulate a quantity of light hitting the photo detector based on an incident angle (α) of output light from the light source, wherein the light hitting the photo detector falls on the photo detector without substantial dispersion of the light.

Regarding claim 2, Yamada et al. shows in Fig. 1 a sealing cap.

Regarding claim 3, Yamada et al. shows in Fig. 1 an absorption element in a path of at least some rays of the light.

Regarding claim 4, Yamada et al. shows in Fig. 1 that the absorption element comprises a disk between the photo detector and the light modulator.

Regarding claim 5, Yamada et al. shows in Fig. 1 that the light modulator comprises a transparent block having a cavity from a side where the light enters the transparent block.

Regarding claim 6, Yamada et al. shows in Fig. 1 that the cavity includes disk-shaped superposed areas.

Regarding claim 7, Yamada et al. shows in Fig. 1 that the disk-shaped superposed areas each include cone-shaped side walls.

Regarding claim 8, Yamada et al. shows in Fig. 1 that the photo detector is configured to convert at least a portion of the light hitting the photo detector into an electric signal.

Regarding claim 9, Yamada et al. shows in Fig. 1 a switch configured to determine a position of the light source based on the electric signal.

Regarding claim 10, Yamada et al. shows in Fig. 1 a light sensor, comprising: a photo detector, and a light modulator configured to modulate a quantity of light hitting the photo detector, the light modulator comprising a transparent block having a cavity formed in a side where the light enters the transparent block, the cavity including disk-shaped superposed areas having cone-shaped side walls configured to direct the light onto a particular portion of the photo detector based on an incident angle of the light.

Regarding claim 11, Yamada et al. shows in Fig. 1 that the light hitting the photo detector falls on the photo detector without substantial dispersion of the light.

Regarding claim 12, Yamada et al. shows in Fig. 1 that the light modulator is configured to modulate the quantity of light hitting the photo detector based on an incident angle (α) of the light.

Regarding claim 13, Yamada et al. shows in Fig. 1 a sealing cap.

Regarding claim 14, Yamada et al. shows in Fig. 1 an absorption element in the path of at least some of the rays of the light.

Regarding claim 15, Yamada et al. shows in Fig. 1 that the absorption element comprises a disk between the photo detector and the modulator.

Regarding claim 16, Yamada et al. shows in Fig. 1 that the photodetector is configured to generate an output signal to control an air-conditioning system in a vehicle based on a position and intensity of a light source that provides the light.

Regarding claim 17, Yamada et al. shows in Fig. 1 a system, comprising: a photodetector configured to determine a position of a light source, determine an intensity of the light source; and generate an output signal to control an air-conditioning system in a vehicle based on the position and intensity of the light source.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEUNG C. SOHN whose telephone number is (571)272-4123. The examiner can normally be reached on Mon-Thur, 7:30 AM -6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGIA Y. EPPS can be reached on 571-272-2328. The fax phone

Art Unit: 2878

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SEUNG C SOHN/
Examiner, Art Unit 2878